

1. (AMENDED) A peptide represented by the formula:
 $X^1\text{-Arg-Pro-Arg-X}^2\text{-Ser-His- X}^3\text{-Gly-Pro-X}^4\text{-X}^5$

wherein X^1 represents a hydrogen atom or an amino acid residue comprising 1 to 25 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain;

X^2 represents a neutral amino acid residue having a side chain which may be substituted;

X^3 represents a neutral amino acid residue having a side chain which may be substituted, an aromatic amino acid residue having a side chain which may be substituted or a basic amino acid residue having a side chain which may be substituted;

X^4 represents a bond or a neutral or aromatic amino acid residue having a side chain which may be substituted;

X^5 represents ① an amino acid residue having a side chain which may be substituted or an amino acid derivative with the C-terminal carboxyl group reduced to a hydroxymethyl group or a formyl group, ② a hydroxyl group or ③ a dipeptide chain comprising an amino acid residue having a side chain which may be substituted and an amino acid residue having a side chain which may be substituted, bound together, or a peptide derivative with the C-terminal carboxyl group reduced to a hydroxymethyl group or a formyl group; and a side chain in each amino acid residue in -Arg-Pro-Arg-, -Ser-His- or -Gly-Pro- in the formula may be substituted;

except the case where X^2 represents Leu, X^3 represents Lys, X^4 represents Met, X^5 represents ① Pro or ② Pro-Phe, and -Arg-Pro-Arg- in the formula represents unsubstituted -Arg-Pro-Arg-, -Ser-His- represents unsubstituted -Ser-His-, and -Gly-Pro- represents unsubstituted -Gly-Pro-, or an ester thereof, or a salt thereof

and said peptide has an amino acid sequence selected from the group consisting of SEQ ID NO:3-21, 25 and 28-40.

2. (ORIGINAL) A peptide, as claimed in claim 1, wherein X^1 is an amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

3. (ORIGINAL) A peptide as claimed in claim 1, wherein X^1 is pGlu which may be substituted or Gln having a side chain which may be substituted, or an ester thereof or a salt thereof.

4. (ORIGINAL) A peptide as claimed in claim 1, wherein X^1 is represented by the formula Y^1-Y^2 (wherein Y^1 represents an amino acid residue comprising 1 to 17 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain, and Y^2 represents an amino acid residue comprising 1 to 8 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain), or an ester thereof or a salt thereof.

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5. (AMENDED) A peptide as claimed in claim 4, wherein Y^2 is a peptide chain represented by ① the formula $B^1-B^2-B^3-B^4-B^5-B^6-B^7-B^8$; ~~wherein each of B^1 through B^8 , whether identical or not, represents an amino acid residue having a side chain which may be substituted~~, ② the formula $B^2-B^3-B^4-B^5-B^6-B^7-B^8$; ~~wherein the symbols have the same definitions as those given above~~, ③ the formula $B^3-B^4-B^5-B^6-B^7-B^8$; ~~wherein the symbols have the same definitions as those given above~~, ④ the formula $B^4-B^5-B^6-B^7-B^8$; ~~wherein the symbols have the same definitions as those given above~~, ⑤ the formula $B^5-B^6-B^7-B^8$; ~~wherein the symbols have the same definitions as those given above~~, ⑥ the formula $B^6-B^7-B^8$; ~~wherein the symbols have the same definitions as those given above~~, ⑦ the formula B^7-B^8 ; ~~wherein the symbols have the same definitions as those given above~~, or ⑧ the formula B^8 ; ~~wherein B^8 has the same definition as that given above~~, or an

ester thereof or a salt thereof.

6. (ORIGINAL) A peptide as claimed in claim 5, wherein B¹ is a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

7. (ORIGINAL) peptide as claimed in claim 6, wherein B¹ is Gly which may be substituted, or an ester thereof or a salt thereof.

8. (ORIGINAL) A peptide as claimed in claim 5, wherein each of B², B³ and B⁴, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

9. (ORIGINAL) A peptide as claimed in claim 5, wherein B⁵ is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

10. (ORIGINAL) A peptide as claimed in claim 5, wherein each of B⁶ and B⁷, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

11. (ORIGINAL) A peptide as claimed in claim 5, wherein B⁸ is Gln having a side chain which may be substituted, or an ester thereof or a salt thereof.

12. (AMENDED) A peptide as claimed in claim 4, wherein Y¹ is an amino acid residue or peptide chain represented by (a) the formula A¹-A²-A³-A⁴-A⁵-A⁶-A⁷-A⁸-A⁹-A¹⁰-A¹¹-A¹²-A¹³-A¹⁴-A¹⁵-A¹⁶-A¹⁷ wherein each of A¹ to A¹⁷, whether identical or not, represents an amino acid residue having a side chain which may be substituted, (b) the formula A²-A³-A⁴-A⁵-A⁶-A⁷-A⁸-A⁹-A¹⁰-A¹¹-A¹²-A¹³-A¹⁴-A¹⁵-A¹⁶-A¹⁷ wherein the symbols have the same definitions as those given above, (c) the formula A³-A⁴-A⁵-A⁶-A⁷-A⁸-A⁹-A¹⁰-A¹¹-A¹²-A¹³-A¹⁴-A¹⁵-A¹⁶-A¹⁷ wherein the symbols have the same definitions

as those given above), (d) the formula $A^4-A^5-A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (e) the formula $A^5-A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein each symbols have the same definitions as those given above), (f) the formula $A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (g) the formula $A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (h) the formula $A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (i) the formula $A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (j) the formula $A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (k) the formula $A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (l) the formula $A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (m) the formula $A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (n) the formula $A^{14}-A^{15}-A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), (o) the formula $A^{15}-A^{16}-A^{17}$ (wherein the symbols have the same definitions as those given above), (p) the formula $A^{16}-A^{17}$ wherein the symbols have the same definitions as those given above), or (q) A^{17} wherein A^{17} has the same definition as that given above), or an ester thereof or a salt thereof.

13. (ORIGINAL) An amino acid residue or peptide as claimed in claim 12, wherein A^1 is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

14. (ORIGINAL) A peptide as claimed in claim 12, wherein A^2 and A^3 are neutral amino acid residues having a side chain which may be substituted, or an ester thereof or a salt thereof.

15. (ORIGINAL) A peptide as claimed in claim 12, wherein A⁴ is a neutral or a basic L-amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

16. (ORIGINAL) peptide as claimed in claim 12, wherein A⁵ is Pro having a side chain which may be substituted, or an ester thereof or a salt thereof.

17. (ORIGINAL) A peptide as claimed in claim 12, wherein each of A⁶ and A⁹, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

18. (ORIGINAL) A peptide as claimed in claim 12, wherein each of A⁷ and A¹⁰, whether identical or not, is an amino acid residue having a hydroxy group in a side chain thereof or a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

19. (ORIGINAL) A peptide as claimed in claim 12, wherein A⁸ is an amino acid residue having a hydroxy group in a side chain thereof, or an ester thereof or a salt thereof.

20. (ORIGINAL) A peptide as claimed in claim 12, wherein A⁸ is Ser, Pro or Hyp, or an ester thereof or a salt thereof.

21. (ORIGINAL) A peptide as claimed in claim 12, wherein A¹⁰ is an amino acid residue having a hydroxy group in a side chain thereof, or an ester thereof or a salt thereof.

22. (ORIGINAL) A peptide as claimed in claim 12, wherein A¹¹ through A¹⁴, whether identical or not, is a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

23. (ORIGINAL) A peptide as claimed in claim 12, wherein A¹⁵ is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

24. (ORIGINAL) A peptide as claimed in claim 23, wherein A¹⁵ is Trp, or an ester thereof or a salt thereof.

25. (ORIGINAL) An amino acid residue or peptide as claimed in claim 12, wherein each of A¹⁶ and A¹⁷, whether identical or not, represents a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

26. (AMENDED) A pharmaceutical containing a peptide, as claimed in claim 1, or an ester thereof or a salt thereof and a pharmaceutically acceptable carrier, excipient or diluent.

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27. (ORIGINAL) A pharmaceutical as claimed in claim 26 which is a central nervous function regulator, a circulatory function regulator, a cardiac function regulator, an immune function regulator, a digestive function regulator, a metabolic function regulator or a reproductive organ function regulator.

28. (ORIGINAL) A pharmaceutical as claimed in claim 26 which is an agonist of a protein containing an amino acid sequence shown by Sequence ID No.:26 or a salt thereof.
